

Application Serial No. 10/007,812  
Amendment dated December 20, 2007  
Reply to Office Action of September 20, 2007

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listing, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A patella replacement device for use in repairing or replacing the destroyed natural patella of a patient, comprising:
  - a first member fabricated from a biocompatible porous metal material and having a rounded fixation surface for implantation in the patella region of a patient with the porous metal allowing biological fixation to the patella region of the patient, said first member having a relatively flat surface opposite said rounded surface and having at least one aperture therein; and
  - a second member fabricated from a biocompatible joint articulating material and having a top rounded surface and an opposing surface having an extending projection for coacting with said aperture to enable said first member to couple to said second member with said second member operative to allow articulation against the femoral area of said patient;

the patella replacement device having a shape conforming to a natural patella of a typical patient.
2. (Currently Amended) The patella replacement device according to claim 1 further comprising an annular ring having a central aperture for coupling to said flat surface of said first member and having a plurality of apertures about a periphery of said ring, the periphery

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[[surrounding]] encircling the rounded fixation surface and extending from a peripheral edge of said first member.

3. (Original) The patella replacement device according to claim 2 wherein said annular ring is fabricated from a biocompatible metal.

4. (Original) The patella replacement device according to claim 3 wherein said metal is titanium.

5. (Original) The patella replacement device according to claim 1 wherein said second member is fabricated from polyethylene.

6. (Original) The patella replacement device according to claim 1 wherein said second member is fabricated from titanium or cobalt chrome.

7. (Original) The patella replacement device according to claim 1 also comprising at least one annular collar attached to at least one of the first member and the second member.

8. (Original) A patella replacement device for use in repairing or replacing the destroyed natural patella of a patient, comprising:

a first member fabricated from a porous metal material and having a rounded fixation surface for implantation in the patella region of a patient with said porous metal allowing

biological fixation to said patella region of said patient, said first member having a relatively flat surface opposite said rounded surface and having at least one aperture therein, and

a second member fabricated from a biocompatible material and having a top rounded surface and an opposing surface having an extending projection for coacting with said aperture in said first member and dimensional so that a peripheral gap is formed between said first and second member when said projection is inserted into said aperture, said gap enabling the accommodation of soft tissue.

9. (Original) The patella replacement device according to claim 8 further comprising:

an annular ring having a central aperture for coupling to said flat surface of said first member and having a plurality of apertures about a periphery of said ring, the periphery surrounding and extending from a peripheral edge of said first member.

10. (Original) The patella replacement device according to claim 9 wherein said annular ring is fabricated from a biocompatible metal.

11. (Original) The patella replacement device according to claim 10 wherein said metal is titanium.

12. (Original) The patella replacement device according to claim 8 wherein said second member is fabricated from polyethylene.

13. (Original) The patella replacement device according to claim 8 wherein said second member is fabricated from titanium or cobalt chrome.

14. (Original) The patella replacement device according to claim 8 wherein said relatively flat surface of said first member has three apertures, with said second member having three projections each adapted to coact with a respective associated one of said apertures.

15. (Original) A patella replacement device for use in repairing or replacing the destroyed natural patella comprising:

a first member fabricated from a porous metal material, said first member having a rounded fixation surface for implantation in the patella region of a patient, and a relatively flat surface opposite said rounded surface, said flat surface having at least one aperture therein;

an annular ring secured about said first member, said ring having a central aperture, an extending flange portion surrounding said first member and a plurality of apertures about a periphery thereof; and

a second member fabricated from a biocompatible material having a top round surface and an opposing surface having an extending projection for coacting with said aperture in said first member and dimensioned so that a peripheral gap is formed between said first and second members when said projection of said second member is inserted into said aperture of said first member.

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16. (Original) The patella replacement device according to claim 15, wherein said annular ring is secured to said first member by an interference fit.

17. (Original) The patella replacement device according to claim 15 wherein said second member is fabricated from polyethylene.

18. (Original) The patella replacement device according to claim 15 wherein said annular ring is fabricated from titanium.

19. (Original) The patella replacement device according to claim 15 wherein said first member has three apertures on said flat surface.

20. (Original) The patella replacement device according to claim 19 wherein said second member has three projections each one operative to coact with an associated one of said three apertures of said first member.

21. (Original) The patella replacement device according to claim 15 wherein said porous metal material accommodates a bone cement placed in said at least one aperture.

22. (Currently Amended) A patella replacement device for use in repairing or replacing the destroyed natural patella of a patient comprising:

a first member fabricated from a biocompatible material and having a rounded fixation surface for implantation in the patella region of a patient, said first member having a relatively flat surface opposite said rounded surface and at least one aperture therein;

a second member fabricated from a biocompatible material and having a rounded surface and an opposing surface having an extending projection for coacting with said aperture to enable said first member to couple to said second member; and

a porous coating containing at least one bone growth material and applied to at least a portion of at least one of said first member and said second member;

the patella replacement device having a shape conforming to a natural patella of a typical patient.

23. (Original) The patella replacement device according to claim 22 wherein the at least one bone growth material is selected from the group consisting of hydroxyapatite, human bone particles, bovine bone particles, ground coral and calcium sulfate.

24. (Original) The patella replacement device according to claim 22 wherein at least one of said first member and said second member is fabricated from a material selected from the group consisting of biocompatible metals, biocompatible plastics and biocompatible ceramics.

25. (Original) The patella replacement device according to claim 22 wherein said first member is fabricated from a metal and said second member is fabricated from a plastic.

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26. (Original) The patella replacement device according to claim 25 wherein said plastic is polyethylene and said metal is titanium or cobalt chrome.